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## FEDERAL INFORMATION PROCESSING STANDARDS PUBLICATION

1988 JANUARY 27

U.S. DEPARTMENT OF COMMERCE/National Bureau of Standards



# REPRESENTATIONS OF LOCAL TIME OF DAY FOR INFORMATION INTERCHANGE

FEDERAL GENERAL DATA STANDARD  
REPRESENTATIONS AND CODES

JK  
468  
.A8A3  
No. 58-1  
1988

FIPS PUB 58-1

**U.S. DEPARTMENT OF COMMERCE, C. William Verity, *Secretary***  
**NATIONAL BUREAU OF STANDARDS, Ernest Ambler, *Director***

## **Foreword**

The Federal Information Processing Standards Publication Series of the National Bureau of Standards (NBS) is the official publication relating to standards, guidelines, and documents adopted and promulgated under the provisions of Public Law 89-306 (Brooks Act) and under Part 6 of Title 15, Code of Federal Regulations. These legislative and executive mandates have given the Secretary of Commerce important responsibilities for improving the utilization and management of computers and automatic data processing in the Federal Government. To carry out the Secretary's responsibilities, the NBS, through its Institute for Computer Sciences and Technology, provides leadership, technical guidance, and coordination of Government efforts in the development of standards, guidelines and documents in these areas.

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James H. Burrows, *Director*  
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## **Abstract**

This standard provides uniform time representations based upon both the 12- and 24-hour timekeeping systems. It provides a means for representing local time of the day in digital form for the purpose of interchanging information among data systems. It specifies the time elements and their sequencing, the use of separators between time elements and the representation of the meridiem designator. This standard adopts American National Standard ANSI X3.43-1986, Representations of Local Time of Day for Information Interchange. This revision supersedes FIPS PUB 58 in its entirety.

**Key words:** ADP standards; computers; data elements and codes; data processing; Federal Information Processing Standard; information systems; local time of day; meridiem designators; separators; sequencing; time elements; timekeeping systems; time representations.

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**Federal Information  
Processing Standards Publication 58-1**

**1988 January 27**

**Announcing the Standard for**

**REPRESENTATIONS OF LOCAL TIME OF DAY  
FOR INFORMATION INTERCHANGE**

Federal Information Processing Standards Publications (FIPS PUBS) are issued by the National Bureau of Standards in accordance with section 111 (f) (2) of the Federal Property and Administrative Services Act of 1949, as amended, Public Law 89-306 (79 Stat. 1127), Executive Order 11717 (38 FR 12315, dated May 11, 1973), and Part 6 of Title 15 Code of Federal Regulations.

- 1. Name of Standard.** Representations of Local Time of Day for Information Interchange (FIPS PUB 58-1).
- 2. Category of Standard.** Federal General Data Standard, Representations and Codes.
- 3. Explanation.** This standard provides uniform time representations based upon both the 12- and 24-hour timekeeping systems. It provides a means for representing local time of the day in digital form for the purpose of interchanging information among data systems. It specifies the time elements and their sequencing, the use of separators between time elements and the representation of the meridiem designator. This revision supersedes FIPS PUB 58 in its entirety.
- 4. Approving Authority.** The Secretary of Commerce.
- 5. Maintenance Agency.** U.S. Department of Commerce, National Bureau of Standards, Institute for Computer Sciences and Technology.
- 6. Cross Index.**
  - a. FIPS PUB 4-1, Representation for Calendar Date and Ordinal Date for Information Interchange.
  - b. FIPS PUB 59, Representations of Universal Time, Local Time Differentials, and United States Time Zone References for Information Interchange (being revised).
  - c. American National Standard ANSI X3.30-1985, Representation for Calendar Date and Ordinal Date for Information Interchange.
  - d. American National Standard ANSI X3.43-1986, Representations of Local Time of Day for Information Interchange.
  - e. American National Standard ANSI X3.51-1975, Representations of Universal Time, Local Time Differentials, and United States Time Zone References for Information Interchange (being revised).
  - f. International Standard ISO 2014-1976, Writing of Calendar Dates in All-Numeric Form.
  - g. International Standard ISO 2711-1973, Information Processing Interchange—Representation of Ordinal Dates.
  - h. International Standard ISO 3307-1975, Information Interchange—Representations of Time of the Day.
  - i. International Standard ISO 4031-1978, Information Interchange—Representation of Local Time Differentials.
- 7. Objectives.** The objectives of this standard are to improve the utilization of data resources of the Federal Government and avoid unnecessary duplications and incompatibilities in the collection, processing and dissemination of data.

- 8. Applicability.** This Federal Data Element and Representation Standard is made available for data interchange among executive departments and independent agencies, and for Federal data interchange with the

non-Federal sector including industry, State, local and other governments, and the public at large.

**9. Implementation Schedule.** This standard becomes effective July 30, 1988. Use by Federal agencies is encouraged when such use contributes to operational benefits, efficiency, or economy.

**10. Specifications.** This standard adopts American National Standard ANSI X3.43-1986, Representations of Local Time of Day for Information Interchange. The latter was approved on June 23, 1986 as a revision of ANSI X3.43-1977, and is published by the American National Standards Institute, 1430 Broadway, New York, NY 10018.

**11. Where to Obtain Copies.** Copies of this publication and the adopted specifications are available for sale by the National Technical Information Service, Springfield, VA 22161. (Sale of the specifications is by arrangement with the American National Standards Institute.) When ordering, refer to Federal Information Processing Standards Publication 58-1 (FIPS PUB 58-1) and title. When microfiche is desired, this should be specified.

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